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09/746,092	12/21/2000	Benny Loenstrup Ammitzboell	42390P9008	2448

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EXAMINER

TODD, GREGORY G

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 05/19/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/746,092

**Applicant(s)**AMMITZBOELL, BENNY  
LOENSTRUP**Examiner**

Gregory G Todd

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

This is a first office action in response to application filed, with the above serial number, on 21 December 2000 in which claims 1-30 are presented for examination. Claims 1-30 are therefore pending in the application.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Pitcher et al (hereinafter "Pitcher", 6,370,142).

3. As per Claims 1 and 6, Pitcher discloses a method and article of manufacture comprising a machine accessible medium providing a plurality of machine readable

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instructions that, when executed by a machine, cause the machine to perform operations, wherein Pitcher discloses:

controlling multicast traffic in a layer 2 network, the layer 2 network including a plurality of devices associated with the network, the plurality of devices including a transmitter, a receiver, and a layer 2 device, the transmitter and the receiver coupled to the layer 2 device (at least col. 5, lines 37-60), wherein controlling the multicast traffic includes:

sending a multicast traffic control protocol query from the layer 2 device to the receiver on the layer 2 network (IGMP membership query) (at least col. 6, lines 17-26);

receiving a multicast traffic control protocol report in response to the multicast traffic control protocol query (membership report) (at least col. 6, lines 30-50; also, col.10, lines 6-60); and

determining whether to perform multicast traffic control protocol pruning on the layer 2 network from the layer 2 device based on the report received (pruning via destination list modification) (at least col. 7, lines 45-60; also, col. 6, lines 17-67).

4. As per Claims 2 and 7.

wherein the layer 2 device has a plurality of ports to which the multicast traffic is selectively forwarded, wherein the transmitter and the receiver are joined to one or more of the ports, and wherein determining whether to perform multicast traffic control protocol pruning on the layer 2 network from the layer device based on the report received includes maintaining a multicast traffic control protocol pruning table to store

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information regarding which ports are joined (using dtags in tables and destination lists) (at least col. 6 line 59 - col. 7 line 60).

5. As per Claims 3 and 8.

further comprising generating periodic multicast traffic control protocol queries, and wherein sending a multicast traffic control protocol query from the layer 2 device to the receiver on the layer 2 network further includes sending at least one of the periodic queries (periodic IGMP queries) (at least col. 1 line 63 - col. 2 line 8).

6. As per Claims 4 and 9.

further comprising ensuring that at least one device on the layer 2 network is sending the multicast traffic control protocol query at selected time intervals (multicast router assuming role of IGMP querier) (at least col. 1 line 63 - col. 2 line 31).

7. As per Claims 5 and 10.

wherein ensuring that at least one device on the layer 2 network is sending the multicast traffic control protocol query at selected time intervals includes executing a multicast traffic control protocol querier algorithm (querier election mechanism) (at least col. 1 line 63 - col. 2 line 31; col. 5, lines 38-60).

8. As per Claim 11, Pitcher discloses a method:

controlling multicast traffic in a layer 2 network, the layer 2 network including a plurality of devices associated with the network, the plurality of devices including a transmitter, a receiver, and a layer 2 device, the transmitter and the receiver coupled to one or more of the ports (at least col. 5, lines 37-60), wherein controlling the multicast traffic includes:

sending an Internet Group Management Protocol (IGMP) query from the layer 2 device to the receiver on the layer 2 network (IGMP membership query) (at least col. 6, lines 17-26);

receiving an IGMP report in response to the IGMP query (membership report) (at least col. 6, lines 30-50; also, col.10, lines 6-60); and

determining whether to perform IGMP pruning on the layer 2 network from the layer 2 device based on the report received (pruning via destination list modification) (at least col. 7, lines 45-60; also, col. 6, lines 17-67).

9. As per Claim 12.

wherein the layer 2 device has a plurality of ports to which the multicast traffic is selectively forwarded, wherein the transmitter and the receiver are joined to one or more of the ports, and wherein determining whether to perform IGMP pruning on the layer 2 network from the layer 2 device based on the report received includes maintaining an IGMP pruning table to store information regarding which ports are joined (using dtags in tables and destination lists) (at least col. 6 line 59 - col. 7 line 60).

10. As per Claim 13.

further comprising generating periodic IGMP queries, and wherein sending an Internet Group Management Protocol (IGMP) query from the layer 2 device to the receiver on the layer 2 network further includes sending at least one of the periodic queries(periodic IGMP queries) (at least col. 1 line 63 - col. 2 line 8).

11. As per Claim 14.

further comprising ensuring that at least one device on the layer 2 network is sending the IGMP queries at selected time intervals (multicast router assuming role of IGMP querier) (at least col. 1 line 63 - col. 2 line 31).

12. As per Claim 15.

wherein ensuring that at least one device on the layer 2 network is sending the IGMP queries at selected time intervals includes executing an IGMP querier algorithm (querier election mechanism) (at least col. 1 line 63 - col. 2 line 31; col. 5, lines 38-60).

13. As per Claims 16 and 26, Pitcher discloses an apparatus, wherein Pitcher discloses:

a layer 2 device (at least col. 5, lines 37-60);

a multicast traffic control protocol querier algorithm executable from the layer 2 device to send multicast traffic control protocol queries to a layer 2 network which includes the layer 2 device (querier election mechanism) (at least col. 1 line 63 - col. 2 line 31; col. 5, lines 38-60); and

a multicast traffic control protocol pruning algorithm executable from the layer 2 device to control multicast traffic in the layer 2 network received (pruning via destination list modification) (at least col. 7, lines 45-60; also, col. 6, lines 17-67).

14. As per Claims 17, 22 and 27.

wherein the layer 2 device includes a plurality of ports (at least col. 5, lines 38-60).

15. As per Claims 18, 23 and 28.

wherein the layer 2 device includes a switch (at least col. 5, lines 38-60).

16. As per Claims 19, 24 and 29.

wherein the layer 2 network comprises a Virtual Local Area Network (VLAN) (at least col. 6 line 59 - col. 7 line 34).

17. As per Claims 20, 25 and 30.

wherein the layer 2 device includes a plurality of ports and a multicast traffic control protocol pruning table to determine which ports are joined (at least col. 5, lines 38-60; col. 6 line 59 - col. 7 line 60).

18. As per Claims 21 and 31.

wherein the multicast traffic control protocol is an Internet Group Management Protocol (IGMP) (at least col. 6, lines 1-50).

### ***Conclusion***

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wiget et al, Bass et al, Armitage, and Smith are cited for disclosing pertinent information related to the claimed invention. Applicants are requested to consider the prior art reference for relevant teachings when responding to this office action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory G Todd whose telephone number is (703)305-5343. The examiner can normally be reached on Monday - Friday 9:00am-6:00pm.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (703)308-7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

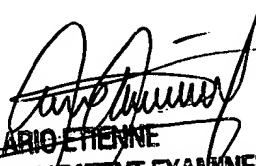
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Gregory Todd



Patent Examiner

Technology Center 2100



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